

THE

Medical and Surgical Lessons

OR

STUDY CASES, WITH ANATOMY,

FOR STUDENTS OF MEDICINE

AND PHYSICIANS IN GENERAL

OF THE CITY OF BOSTON

AND NEW YORK

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THE
Medical and Surgical Lessons
OF
THE LATE WAR.

THE INTRODUCTORY ADDRESS

DELIVERED BEFORE THE

MEDICAL CLASS

OF THE

KENTUCKY SCHOOL OF MEDICINE,

LOUISVILLE, KY., OCT. 5, 1868.

Adwin Samuel
22193
Washington, D.C.
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Professor of General Pathology and Pathological Anatomy.

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CORRESPONDENCE.



LOUISVILLE, KY., Oct. 6, 1868.

Prof. E. S. Gaillard:

DEAR SIR: At a meeting held by the students of the Kentucky School of Medicine, the following committee was appointed to respectfully request permission to publish your "Introductory Lecture," being convinced that its publication will redound to your credit, also to that of the Institution of which we are students, and feeling that it will be greatly appreciated not only by the profession, but also the public.

Soliciting compliance with the above request,

We remain yours truly,

T. J. TURPIN, Chairman.
W. F. PATTEN,
R. J. THOMPSON,
W. T. SHUMATE,
H. C. URBAN,
A. PORTERFIELD.

LOUISVILLE, KY., Oct. 8, 1868.

Gentlemen:

Your note, in which you desire, on behalf of the class, that the introductory address, delivered by me, should be placed in your hands for publication, has been received.

I comply with the request, with pleasure, and, through yourselves, thank the class for this kind and courteous manifestation of their appreciation and esteem. Wishing yourselves, and those whom you represent, a pleasant and remunerative connection with the Kentucky School of Medicine, I am,

Very truly your friend,

E. S. GAILLARD.

Messrs. T. J. Turpin, Chairman, W. F. Patten, R. J. Thompson, W. T. Shumate, H. C. Urban, A. Porterfield.

Resolved, As Prof. E. S. Gaillard has kindly placed in our hands the manuscript of his Introductory Address, that a committee be appointed to have it published.

COMMITTEE—W. C. Miller, Chairman, P. B. Turpin, H. C. Ireland, N. Sageser.
THEOD. T. TAYLOR, President.

L. J. FRAZEE, Jr., Secretary.

A FEW years since, the Southern States represented all that is peaceful, exalted and prosperous. Her distinguished sons occupied, acceptably and efficiently, the highest positions, in the gift of a happy and contented people. Her statesmen were known and admired, wherever mental vigor, combined with simplicity and purity of character, are most esteemed and respected.

Agriculture, the basis of all national wealth, poured its riches into the lap of state. The tenantry of the soil, was the best fed, the best protected, the most humanely worked, the most contented and happy known to history. The busy plough transmuted annually the chemical wealth of the soil into a safe and legitimate currency; while the hum of the loom and the ring of the anvil made sweet music about the precincts of prosperous households. The avenues of commerce were crowded by the products of well-protected industry, and the merchandise of foreign nations eagerly sought an exchange for the prolific staples of this country. The learned professions constituted everywhere a satisfactory element in the political and social fabric. Theology established its divine mission in every household and was enabled to carry the blessed light of the Gospel to illumine the darkness of heathen countries. Law guarded the barriers and landmarks of every community and secured stability and protection to every species of property, while medicine was reasonably supported in its ceaseless ministrings at the bedside of the afflicted and diseased. The picture was perfect and beautiful in all the elements that composed it. The South was prosperous and happy.

A crisis came in the political economy of the country, and the people of these States, in the defence of inalienable rights, were driven to the arbitrament of arms. A magic change swept over every community. The busy marts were deserted by all, save those who prostituted physical and pecuniary resources to the sordid accumulation of unrespected gain. The pruning hook was transformed into the sword. The ploughshare rusted in the furrow; a Cincinnatus was in every field, while, Putnam-like, the sturdy farmers of the country contributed their favorite horses to the formation of neighborhood squadrons of cavalry. Peaceful clergymen surrendered their church bells to the exigencies of the State, and the metal which had long summoned devout congregations to the quiet sanctuary was devoted to the martial objects of desolation and death. Distinguished ecclesiastics became renowned generals. Learned lawyers exchanged the brief and bag, for the command of battalions and the association of the battle-field. The white wings of commerce were peacefully folded, and those staples which brought, in exchange, an abundant merchandise, were devoted to the protection and sustenance of a citizen soldiery. Regiments and brigades and divisions were speedily marshalled into position and the long expected clash of arms was suddenly precipitated. War was actually begun and the country brought its whole strength and energy to prosecute it with vigor and success. For five long years the contest continued; each foot of ground was desperately disputed, and the struggle only ceased, when the endurance, the fortitude, the splendid courage of Confederate soldiers had

brilliantly surpassed the heroic records of those who have made glorious the classic battle-fields of history. At a quiet country-house, in a county of Virginia, that familiar flag was furled which for so many years had panoplied the victorious hosts who made its device glorious and its colors immortal. The dreams, the aspirations, the prayers of the Southern people were shattered at that hour, and the star of hope, which had so long guided them, sank amid the gloom of sorrow and the blackness of disappointment.

Men sought their desolate and long-abandoned homes and the career of the Southern soldier had terminated. Aroused from this passive period of gloom and despair, the South gathered courage to measure its ruin and desolation. The land was billowed with graves. The widow and the orphan were houseless and homeless. Agriculture was a wreck. A happy and efficient tenantry had become idle and worthless vagrants. Capital had fled. Commerce was a hope, and the scenes of a once-crowded mart had become but a melancholy memory. Household goods and utensils were bitterly exchanged for daily bread and the whole South presented a uniform picture of desolation and distress.

In this sad history none suffered more severely than the physician; he suffered in common with all, for with all, in war, as in peace, is he the familiar associate and well-tried friend. His property, like that of others, had been swept away, and he had not only to bear his own losses, but, in the discharge of his daily labors, to witness the irremediable sufferings of others. Unlike all others, however, the physician has had much compensation for the trials, disasters and disappointments of the late struggle. He has had an opportunity of seeing much, of observing much and of learning much. Few, perhaps, appreciate the fact, that the war has been of incalculable advantage to the physician, for it has afforded a school, in which, during a few years, he has learned those great lessons which a life time would have been powerless to impart. He is more practically efficient and useful, at the bed-side now, than perhaps he has ever been before, and the whole country is now furnished with a medical corps which the war has thoroughly educated and reliably trained. The physician, then, has been a great gainer, and, through his increased efficiency, every community has derived some compensation, at least, for its struggles and its sorrows.

It is in regard to this subject that I propose to speak this evening, and I ask your attention while examining "The Medical and Surgical Lessons of the Late War." It is difficult, on an occasion like the present, to examine any subject, which, professional in character, should yet interest unprofessional listeners, but, by avoiding all medical technicalities, I hope to make this discussion intelligible, at least, if not interesting.

After the desperate struggle in the Crimea, between the Russian, English and French armies, Macleod, in his well-known work entitled, "Notes on the Surgery of the Crimean War," presented, to the profession, all that he had observed (of surgical interest) in the English field and general hospitals. The deductions, or laws, there laid down, by so competent an observer, after an experience extensive and varied, have naturally influenced the practice of both the civil and military surgeon. Dr. Macleod announced, that where a soldier has been wounded about

the skull, there being a fracture of the bone, with or without depression of the fragments, that it is bad surgery to use the circular bone saw (known as the trephine) for the section and removal of the injured bone. It has been the custom of the military surgeon, since that time, to allow the wound thus made to remain unchanged, or at least to abstain from removing depressed bone by the use of the saw mentioned. The result of such surgery was disastrous and the mortality excessive. After the recent war had lasted a year or more, it was determined by Confederate surgeons to disregard this teaching and to institute immediate and radical interference in all similar cases. Such patients were subjected, some immediately and some as soon as their condition warranted it, to the operation for the removal of the depressed bone. The results were as gratifying as unexpected; the patients recovered very frequently and the previous mortality was immediately reduced. The records of Confederate hospitals demonstrate that death, in such cases, when the specified operation had been performed, was an exceptional result and that the teaching established by Macleod was defective and incorrect. The lesson of the late war then, in this connection is, that the use of the bone saw in gunshot fractures of the skull, so far from being unjustifiable, is essentially correct and indispensable. There is an additional reason for the use of the bone saw in such instances; it is that, by this means, interrupted consciousness and impaired intellection may be restored. There were cases in the early period of the war when the bone saw was neglected, and where, consequently, patients, after sustaining a gunshot fracture of the skull, have recovered with intellection seriously impaired. It is fairly to be assumed, that had such patients been trephined, recovery would have been equally the result, and that intellection would not have been thus seriously impaired. A remarkable instance, showing the fairness of such an assumption, occurred in Richmond, Va. A robust and intelligent young soldier, after sustaining an injury of this character, made physically an entire recovery, but his intellection was completely suspended, or, as it was supposed, lost. His parents, after enduring, for a season, the severe trial of seeing a bright and intelligent son reduced almost to a condition of idiocy, brought him, from some happy inspiration, to the city mentioned for treatment. The surgeon consulted used, without hesitation, the trephine, and the result elicited the sympathy and congratulations of all. The apparently idiotic boy, as soon as the bone pressure was removed from the brain, became suddenly restored to consciousness and for the first time, since his injury, recognized and appreciated the joyful father standing at his side. Here violence had usurped the throne of reason, but, by a single stroke, the usurper was dethroned; the beautiful chambers of the mind, shrouded in gloom and obscurity, were, by the light of science, made, once more, to reflect the glories of intellection. This is an extreme case, but it seems to make more impressive the recent surgical lessons, that the use of the trephine should be the rule and not the exception, in fracture of the skull, attended with depression of the fragments. Epilepsy of many years duration, and due to a similar cause, has been promptly removed by the same operation.

It has been a common impression, both among physicians and the general public, that where any portion of the skull has been removed by violence, that the danger to life and intellection has been in a direct

ratio, with the extent of the bone removed and the amount of brain exposed or lost. Without going into details, it is sufficient to state, that the surgical records of the war prove this to be a serious error.

During the Crimean war, amputation at the hip joint was so exceedingly fatal (there being a mortality of nearly one hundred per cent.) that the operation was condemned and regarded as reprehensible surgery. It is interesting to know that success in the Southern and Northern army was sufficient to reverse this surgical law, and to render such amputation judicious and proper.

It has been a question with military surgeons, whether amputation was advisable in compound gunshot fractures, involving the upper third of the femur (a term which many of those present are not expected to understand, yet the subject is nevertheless introduced, as the lesson, in this connection, was one of the most valuable in the surgical experience of the war.) Details in this connection are not admissible, but the teachings of such masters as Dupuytren, Larrey, Guthrie, Macleod and others were pithily summed up in this surgical aphorism, "in rejecting amputation in such cases, we lose more lives than we save limbs," or, in other words, when such casualties occurred, the French and English law was, sacrifice the limb. The experience derived from our own records on this point, reverses this action, rendering the future decision of the military surgeon a cause of joy, rather than of sorrow to the unfortunate sufferer; instead of losing his limb, with a heavy per centage in favor of death, recent surgical lessons teach, that the limb may not only be saved, but saved with a heavy per centage in favor of life. To the wounded soldier, no surgical experience has been more happy and important; it warrants the frequent preservation of the limb, with ultimate recovery, as a substitute for a hazardous operation, with the probabilities of death.

In civil practice, resections (or the removal of joints with the preservation of limbs) are eminently proper. We have learned, however, that in military surgery, resections, unless confined to comparatively small joints, are injudicious, if not reprehensible. The surroundings and physical condition of patients, in civil and military hospitals, render this difference in results easily intelligible.

Military surgeons, in the armies of Europe, have taught that traumatic tetanus or general spasms, from sustained wounds, was commonly caused by exposure in field or open hospitals, and, as a result, those wounded were kept (as far as practicable) in closely built rooms. This dangerous error was happily corrected by the surgical lessons of the war. Tetanus was comparatively a rare incident in the practice of Confederate surgeons, this result being conspicuously due to the fact, that the wounded were largely treated in open tents or in hospitals unceiled or unplastered. In other words, European teaching tends to produce tetanus, while, by the American lessons, we have learned how to prevent it; or, at least, how to largely reduce the per centage of its occurrence.

To the same causes is due the fact, that deaths by hospital gangrene or mortification were far less in American than in European hospitals. The judicious course adopted by the Surgeon-General of the Confederate service contributed, very conspicuously, to the limitation of deaths from this scourge of military hospitals. This course was a systematic transfer of gangrenous cases from cities and towns to the pure air of the

mountains, and, when such transfers were not practicable, treatment in open tents was always enjoined.

To a Confederate surgeon, Dr. H. F. Campbell, of Georgia, is due the credit of having instituted the ligation of the chief artery supplying a gangrenous limb for the eradication of the disease. His successes were numerous and marked.

There are two surgical facts, which, during the period before mentioned, were clearly and indisputably established. These facts are of interest, not only to the physician, but to the lawyer and to the general public. When a wound is made with a clean knife, or other sharp instrument, there is, in a short time, manifested a vital fluid, which agglutinates the contiguous surfaces and the wound heals by, what surgeons have been pleased to term, "first intention." This mode of reparation was once considered only possible, under the circumstances mentioned. It was consequently held, that a gunshot wound could not heal in this way, as the opposing surfaces, instead of being clean and smooth, were rough and mutilated. Indeed, so strong was this conviction, that writers on surgery teach, that gunshot wounds do not heal by first intention, and, with many, such a mode of healing would be regarded as a strong evidence of the wound having been caused by an entirely different agent. By means of circulars sent to most surgeons of the Confederate army, testimony on this important subject was extensively elicited, and the result proved, conclusively, in very many instances, when a wound was produced, even by the tearing and destructive action of the minnie ball, that union by first intention was indisputable.

The second fact is even more important, in its medico-legal relations. It has been held, by the most distinguished authorities, in their surgical teachings and in their testimony before courts of law, that when a ball passes through any portion of the body, the wound of exit is conspicuously larger than the wound of entrance. The experience of a very large number of field-surgeons was obtained in regard to this point and it was clearly demonstrated, that the exceptions were so numerous as to destroy the validity of the law, in regard to the size and shape of such wounds. These facts, small apparently in their teachings and results, are of great consequence, at times, in establishing the reputed guilt of criminals. It is familiar to many here, that by a knowledge or ignorance of these details, the testimony of surgeons, before courts of justice, becomes important or valueless. An illustration of this truth is to be found in an interesting incident in the life of the great surgeon, Sir Astley Cooper. A notorious criminal, who would otherwise have escaped his merited punishment, was convicted on the testimony given by this close and accurate observer; on examining the locality of the murder and the wound of the victim, he proved not only that this wound had been made by a pistol-ball, but that the pistol had been fired by what is termed a left-handed man. This important fact, when added to others proving such a peculiarity on the part of the prisoner (with other details unnecessary to mention), was sufficient to procure his conviction and to relieve society from the danger of his presence. It is thus seen, that the closest attention to the mode of healing and to the appearance of gunshot wounds is often of practical interest and importance to the unprofessional, as well as to the professional members of society; it is evident also, that

that the surgical lessons of the late war, even in their unimportant relations, may become of vital consequence to the well-being of every community.

There is, surrounding every bone an investing membrane (or periosteum) which contributes to its nutrition, and, in cases of fracture, becomes a prominent agent in effecting its repair; the belief has been, until recently, universal, that this membrane was absolutely essential to the reparation of fractured bones, and that, if stripped away, the bone would perish; or, as the law was given, denuded bone must die. In obedience to this testimony, where bone was discovered to be denuded, it was promptly removed. The surgical records of the war show, that this was bad practice; that denuded bone does not die; that it is re-covered; that other agencies will cause a repair of the bone, and that to remove denuded bone is reprehensible surgery. A knowledge of this important lesson will secure to the injured the preservation of a limb, when, according to the teachings prior to the war, such a limb would be sacrificed.

Several years since, the Czar of Russia instituted a surgical commission for the purpose of ascertaining what amount of injury may be produced by the windage or atmospheric concussion caused by a cannon-ball. In making this investigation, a target was so constructed, that a self-moving apparatus would register the amount of force exerted by a ball passing near the surface of the target. After repeated trials it was found, that in no instance is the windage of a ball, from even the largest field-piece, sufficient to exert a force detrimental to either health or life, and that the statement of deaths, or injuries, ascribed to such a cause, could not be received as authentic or true. The records of the late war show, that the decision of this commission is correct, as in no instance could death or injury be properly ascribed to the windage or atmospheric concussion created by even the largest balls.

So much then for the surgical lessons to be derived from that war record, whose every page has been written with the blood of the noblest and best of our land.

The medical lessons of the war have been numerous and important. From the limited period, however, allotted to this address, these lessons can only be briefly narrated.

We have learned from repeated post-mortem examinations, that camp fever, which decimated our regiments, is not, as was supposed, typhoid fever. This lesson is, practically, very valuable; it is well known that typhoid fever is self-limiting in its nature, and that by no course of treatment can its duration be abridged. If camp fever be regarded as identical with typhoid fever, the physician would naturally deem it bad practice to give medicines for the arrest of the disease, and camp fever would, consequently be allowed to run its course. With recent war lessons as our guide, we know that camp fever is not typhoid fever; that, by proper treatment, its duration can be abridged; that the sufferings of the patient can not only be conspicuously diminished, but, in most cases, happily terminated.

Twelve years ago, the French and English Governments instituted, upon the coast of Africa, a series of experiments, with the view of ascertaining whether malarial fever can not be prevented by the administration of prophylactics, or preventive medicines. The French deter-

mined that such diseases could be prevented, while the English officers asserted, that such a result was impracticable. This matter was carefully investigated by Confederate surgeons. It is well known that in no part of America is malaria more deadly than on the Sea Islands and in the inland swamps of the Gulf States. This subtle poison, malaria, we can, as yet, only recognize by its effects. After all that has been written upon this subject, its cause, nature and essence are yet wrapt in the mists of vague hypotheses; it is the toxic apocrypha; the mysterious hieroglyphic which, transcribed by nature's hand, owns not yet its Champollion.

"Malaria settles not over thin and barren wastes; nor over soils that have been from all times desolate, but over places in which Southern suns ripen delightful gardens and about the sites of cities, where the pomp of palaces has passed away." In no spot is it more deadly, than on the beautiful Sea Islands and in the romantic rice regions of the Carolinas; localities which, a few years since, the abode of wealth, hospitality and refinement, are now eloquent witnesses of the misrule of the present and melancholy monuments to mark the happiness of the past. It was in these highly malarious atmospheres that our troops (coming from localities where malaria was rarely manifested) were encamped during the most sickly periods of the year. It was under such an eminently fair trial, the fact was demonstrated, that, even under the most unfavorable circumstances, malarial fever, by the administration of proper remedies, can be prevented. Under the rigorous blockade existing, quinine in sufficient quantity could not be obtained, but the bark of the dogwood and willow-tree was employed, in saturating whisky with their active principles cornine and salicine; such whisky, or such tincture, was given three times a day, and the result not only proved that malarial fever can be prevented, but that such prevention can be induced by medicines, far less active, than that used by the French and English, on the coast of Africa; that remedy being quinine.

The excellent results, derived from the use of the whisky containing dogwood, were doubtless due to the regularity with which the remedy was taken, for from some cause, not difficult to understand, the patients all approved highly of the treatment instituted and were careful to remind their physicians of the hours appointed for receiving their favorite medicine. The point in dispute was, however, settled, that by the use of proper medicines malarial fevers can be prevented, as well as cured.

We learned from the records of the war, that yellow fever does not exist as an endemie, or a disease peculiar to a people, in any part of the United States north of Galveston, Texas; that the prevalence of this fever, at any point north of Galveston, is due to an imported, and not to a local cause. During the long occupation of New Orleans, by the Federal army, but few cases of yellow fever existed and these were taken from a fruit vessel which had, by some error, been allowed to pass the rigid quarantine established. This imported or local origin of this fever has been long a disputed question, and one which has elicited the most abstruse discussion on the part of physicians. The question may now be regarded as settled, the war having taught us this lesson, that, with reasonable regard to municipal cleanliness and with the establishment of a proper quarantine, this scourge of American cities may certainly be excluded. The decision of the New York Academy of Medi-

cine, after a discussion of this subject for several months, has also, by this war record, been confirmed, viz.: that where yellow fever prevails, north of the yellow fever zone, it spreads by contagion; not the contagion springing from personal contiguity or contact, but from the propagation of the poison, through materials capable of retaining it; these materials being cotton or woolen clothing, the confined air in the hold of vessels, etc.

The experience of the war has taught a medical lesson in regard to the lancet. With the present information on this subject, we can scarcely realize that condition of the professional and unprofessional mind, when the lancet was regarded as the preventive and panacea for all human ills. Perhaps no more amusing illustration of this infatuation can be mentioned, than an anecdote recorded of the celebrated Dr. Rush, of Philadelphia. Meeting unexpectedly, an old friend, during the height of the yellow fever, in 1793, he asked him why he had not left the city. The friend replied, that he had sent his family away, but could not leave himself. "Then," said Dr. Rush, "go home, my friend, and be bled immediately." This great physician had evidently studied Moliere, who, in the days when high health was to be feared and to be subdued with the lancet, declared, in regard to bleeding, "the method is salutary and as one drinks for thirst to come, one must likewise be bled for illness to come." This custom of bleeding, even during the last generation, was so universal that where physicians could not be obtained, the people submitted themselves to any one blessed with the possession of a lancet. The late Mr. Hazard, a prominent gentleman in the West, though ignorant of medicine, had a large practice of this kind. One day a stout, hale-looking Irishman came up to be bled. "Mr. Hazard," said he, "and how much do you charge for taking a pint of blood?" (the quantity usually drawn.) "Nothing," was the reply. "Then, by St. Patrick," said Pat, "you may take a quart;" and he evidently believed that he had obtained a decided advantage over his physician. The lancet, formerly the inseparable companion of the physician, now rests quietly in its case, incrustated with rust; a thing of the past; an object of curiosity and reproach. Young Physic boasts that he has never seen a lancet, and expresses his surprise that such a weapon should ever have been in universal use. Taking the practice of the present day, as his guide, he cannot see why such a sanguinary operation should ever have been necessary. He looks with disgust at the conduct of his predecessors, loudly declaiming against their want of judgment, and like the Pharisee in the Bible, is devoutly thankful that he is not like other men. Scrupulously abstaining from spilling blood, he entrenches himself behind his wine, his whisky, his brandy, his milk punch and his beef essence; bidding defiance to disease, and, in the triumph of his pride, regarding himself as the very paragon of physie. "The lancet, seriously speaking, is almost abandoned, and the lesson of the war teaches, that it may be abandoned in safety; for the innumerable ailments of the soldier, both medical and surgical in character, were successfully treated, without resorting to this classic, yet obsolete weapon."

Twenty years ago, patients suffering from cutaneous diseases, measles, scarlet fever, small-pox, etc., were placed in confined rooms and physicked and dosed immeasurably. The first step towards progress was,

when physicians learned that these diseases were self-limiting and that medicines could not abbreviate their duration; there was still, however, an indisposition to give such patients an abundance of fresh air, there being a fear that the eruption would be driven in, as it was termed. The war has taught us, in regard to this subject, a valuable lesson. The mortality, from these diseases, was less in the Confederate army than it had ever been known before, and this fact was due, entirely, to the system, involuntarily adopted, of treating all such cases in rude and open hospitals. Indeed, the smallest mortality from small-pox, that I had an opportunity of observing during the war, was at Macon, Ga. I visited the small-pox camp there, when snow carpeted the ground, and saw the most frightful cases of confluent small-pox treated in small A shaped tents; these, as most present know, were, as a protection, entirely valueless. The mortality at that camp, from the most malignant cases, was less than that existing in the oldest and best hospitals in Europe. This result was not due to the treatment, for the physician in charge was certainly the most ignorant that it has ever been my misfortune to meet, having only sense sufficient to be sure that he knew nothing, and so abstained from the use of medicines. We learned thus, two valuable lessons: first, that medicine, in such cases, is not necessary, and, next, that abundant ventilation, even with the coldest air, will reduce the mortality to its minimum. There were, also, other lessons of importance in this connection, viz.: that, after vaccination, the formation of immense ulcers, with coincident cutaneous eruptions, was not due to impure vaccine, but to the physical deterioration of the soldier, teaching us the necessity of caution in the institution of vaccination under such circumstances. The same discovery was coincidentally made in Italy. This was the first lesson. The next was, that malignant diseases could, in any stage, be propagated by the vaccine used. Soldiers in Northern Georgia and Tennessee, in perfect health, died from diseases caused by the use of bad vaccine, obtained from Pensacola.

That celebrated old warrior, Peter the Great, after a long experience, testified, that the courage of soldiers was greatest after eating, while Napoleon I. notoriously preferred to fight his soldiers when hungry. There was one lesson in this connection which we could not learn, viz.: who of these two confessed authorities was correct. Confederate soldiers fought with such uniform and brilliant gallantry, at all times, under all conditions and at all hours, that the theories of both these worthies must be abandoned. There was one fact, however, worthy of note, militating against the experience of the old Russian warrior; it was this, that courage and fortitude under fire were not, by any means, in a direct ratio with a high degree of physical vigor and health. It was no unusual spectacle to see the burly bullies of court-house towns and cross-road taverns sink down upon the battle-field, pale with fright, while beardless and delicate boys passed them, with a smile, to meet victory or death.

The much disputed question, in regard to the efficiency of the negro, as a soldier, has been permanently settled. It will not be necessary to go into details; these few facts are quite sufficient; they tell the whole story. In the Federal armies, there died from action, or from wounds, of regulars, 30 per 1,000; of volunteers, 35 per 1,000; of negroes, or,

as they were somewhat amusingly termed, "colored troops," only 16 per 1,000, (less than one-half.) So much for the battle-field. How is it in regard to the "vigour of the negro in camp?" There died of disease, regulars, 42 per 1,000; of volunteers, 59 per 1,000; of negroes, 141 per 1,000. These figures are authentic and official. The negro, though fighting, for what was represented to him, as the great boon of freedom, exposed himself so little, that the ratio of deaths from the casualties of the battle-field, was less than half of that, which obtained with the white troops, while he was so little able to bear the exposure of the camp, that he suffered to the extent of 141 per 1,000, when the mortality among the white troops only reached 59 per 1,000. The negro, too, was acclimated and accustomed to the atmosphere, in which he was operating, while the white troops, very often, were either foreign mercenaries or from a climate far distant and different. It is not very surprising that the negro regiments were, at the close of the war, disbanded.

There is no fact in our profession, more indisputable, than that frequency and facility of observation lead directly to independence and correctness of judgment. In the early days of our art, when mutilation of the dead body, by the physician, was visited by retributive stoning on the part of the populace, medicine was a dream, and the few who enjoyed the more than ordinary advantages at the bed-side, or dissecting table, were accepted as absolute and unquestionable authorities. This condition necessarily induced a degraded and servile devotion to authority. So conspicuous was this, even as late as the seventeenth century, that Moliere, in his comedy *L'Amour Medecin*, properly castigates such folly in the following dialogue, between the physician Toinet and the maid Lisette: Physician—"How is the coachman?" Lisette—"Very well. He is dead." Physician—"Dead?" Lisette—"Yes." Physician—"That is impossible." Lisette—"It may be impossible, but it is true." Physician—"He cannot be dead, I say." Lisette—"I tell you he is dead, and what is more, he is buried." Physician—"I will not believe it, for your friend has been sick only six days, and Hippocrates says that such a disease never terminates before the twenty-first day."

Now there was no teaching, during the late war, more invariable, than that a slavish obedience to authority led the physician into error and the patient into absolute danger. There was no fact, connected with the medical history of the war, more gratifying than that facility of observation destroyed this servile obedience to authority, and rendered the physician more accurate in reasoning, and more efficient at the bed-side.

What shall be said in regard to the native medicines, or medical plants of the South? There was a time when every natural substance, possessing any medicinal value, was supposed to indicate, by a well-marked external character, the disease for which it is a remedy. It was held that each plant had its "signature," as it was termed, and that whereas turmeric is of a yellow color, it must be capable of curing jaundice; that the eyebright, having a black spot on its flower resembling the eye, must be the best application, in affections of that organ; that as the lungwort resembles, in its leaves, the texture of the lungs, it must be good in pulmonary affections, and, for the same reason, the

liverwort was to be used in biliary disorders. These primitive ideas have been much modified, but even as late as the last generation there was an expressed belief, on the part of distinguished physicians, such as Rush, Drake, Hosack and others, that the plants of each section of country were all sufficient for the eradication of diseases peculiar to that country. The profession have been slow to abandon this belief, and many have entertained a lingering hope that it would yet prove true. The experience of the Confederate Medical Bureau must forever destroy such a hope, for after thoroughly examining "the resources of the Southern fields and forests," there has been no lesson derived, worthy of mention. There is, however, one extremely interesting and astonishing fact, in connection with the subject of remedies, which should be mentioned here. It is that during the long, rigorous blockade existing throughout the war, the Southern people learned that they could actually live without quack medicines; and clergymen and judges, and lawyers and postmasters, discovered that they could exist, in comparative happiness at least, without giving their characteristic testimonials in support of this abominable trash.

The present opportunity, cannot be lost, of offering a deserved tribute to the medical officers of the Confederate army, by one who knew them well and intimately, as distributed over an area extending from Mississippi to the Northern boundary of Virginia; that body of men, among whom, as is not generally known, many were killed in the discharge of their duties on the field; many lost limbs, and very many were dangerously or mortally wounded. The first Napoleon honored himself, in honoring his friend and adviser, the celebrated Dr. Larrey, whom he made a baron of the empire. In most European countries, medical officers have been breveted for gallantry on the field of battle, and for their equal bravery in the deadly wards of the plague hospital. The present noble sovereign of Great Britain has herself decorated many of her medical officers, for their heroism and distinguished services in her armies; while the names of Astley Cooper, of Sir Benjamin Brodie, of Sir James Simpson, of Sir William Ferguson, of Sir Charles Bell, of Sir Henry Hulford, Sir James Syme, Sir Braxton Hicks, Sir Henry Thompson, and of many others, show that the British Government equally rewards meritorious deeds performed in the quiet walks of private life. Many of the French medical officers now wear the cross of the Legion of Honor. With a few exceptions, European governments have invested their medical officers with the highest rank, and with the noblest honors. In these armies are to be found medical officers wearing various emblems of rank, from that of the simple lieutenant to that of the major-general. In the United States service, the grades of rank run from that of lieutenant to that of the brigadier. The Confederate service formed the singular exception in this respect. There was in this army (a few officers of the old service excepted) no absolute rank, but, in place of it, that military anomaly "assimilated rank," or a name only, by which disbursing officers were to be governed in the adjustment of monthly pay and post allowances.

Officers in the quartermaster and commissary departments were, as was right, invested with actual rank, but while these officers, far distant in the rear of the armies, were thus protected, the medical staff, which endured, with the soldiers of the line, the trials of the march, the dan-

gers of the battle-field and the horrors of the hospital, were made a singular and strange exception.

This result was due to the individual opinions of that unhappy chieftain, whose great name and historic character, united with the sad memories of classic battle-fields and immolated heroes, form the only heritage of those who are left to glory in the records of such a past and to treasure its sublime story for the wonder and admiration of the future. Is it necessary to mention the name of this great chieftain? All here know that reference is made to Mr. Jefferson Davis. It was one of the peculiarities of this great man to deprive the medical officers of his army of their actual rank, but the future has yet to record the name of the first of these officers who could, now, in regard to him, utter a harsh word or a bitter testimony. Though thus deprived of a right, universally accorded elsewhere, though thus stripped of title, rank and all prospect of promotion, did the medical staff of the Confederate army become less zealous, less efficient or less true?

If patriotism consists in the sacrifice of wealth, comfort, station, home and family in the support of an adopted cause, were these men not patriotic? If it be bravery to meet death and danger, while armed, on the battle-field, was it less brave to meet these perils when unarmed? If it be fortitude to endure the terrors of shot and shell, when applause and promotion are part of a soldier's reward, is it less of fortitude to endure the same perils, when the stimulus of returning fire for fire is impracticable and the prospect of promotion is forever destroyed? As promotion was the reward for honestly disbursing millions for the well, was it less due for honestly disbursing millions for the sick? When the smoke of battles was swept away and the heroes of such scenes were by a nation blessed, as in sleep they forgot their triumphs and their trials, were those who passed through similar dangers, and who, far into the dismal night, toiled and wept while relieving the agonies of their mutilated comrades, less entitled to the reward of appreciation and praise? If the medical officers in the Federal army, furnished with all the appliances necessary for the relief of the sick and wounded, were promoted for their efficiency and scientific skill, shall not those, who, with all the difficulties of closed ports and empty chests, always equaled and often excelled them, not have their reward? Is history to say nothing for these men? Those appreciated them most who knew them best. If patriotism and bravery and fortitude and honesty and fidelity and scientific worth constitute the leaves in the laurel crown, shall these men not be adorned with them? They have nobly won this crown, but it has ever been withheld from them. Will this assembly confer it?

Lastly comes the lesson most welcome and most dear to us all—the lesson taught by the women of the South. Mrs. Elizabeth Barrett Browning has embalmed, in verse, the memory of the Italian countess, who, in her rarest robes and purest diamonds, visited the Italian hospitals, to do homage to the heroism and valor of her wounded and dying countrymen. What is to be said of those, who, discarding their costliest silks and brightest jewels, also visited the hospitals of their country; not to render a passing homage, but to perpetuate this by their presence and to make it immortal by their acts. We have justly admired the Sisters of Charity for their patient self-denial; the faithful discharge of arduous and revolting duties; for their personal sacrifices

and their noble vocation; their record has been regarded as heroic and wonderful; so wonderful that their order has been limited and with difficulty sustained; but, at the first booming of the cannon, Sisters of Charity sprang up at every Southern fireside. Reared in luxury and refinement, in delicacy and seclusion, they made a noble sacrifice of their womanly instincts and beautiful antecedents, cheerfully surrendering everything to minister to the suffering and wants of their stricken countrymen. Unlike that of the Italian princess, theirs was not a passing tribute; it was the fire of a sublime devotion, which, kindled at Sumpter, burned brightly even at Appomattox; burned long after the flag they loved so well was furled amid gloom and disappointment. Oh, the women of the South! they have always been distinguished for their great purity of personal character; for their exalted virtues and noble characteristics; but, by their action during this war, they have built up, in the hearts of Southern men, an altar, at which they will be loved and praised and worshipped forever.

A few words to you, gentlemen, who are about to become students in this Institution, and I have done.

It becomes my duty in behalf of the Faculty of this College to offer you a few words of kindness and welcome.

You are about to pass through five months of uninterrupted labor, and many of you hope to receive your diploma, testifying to an honorable proficiency in your studies and conferring upon you the right to enter the ranks of the profession. Your student life, now commenced, must never terminate, for, if it ever ceases, let me remind you, that you will no longer deserve the title of physician. The time has now arrived when you are to think, work and act. These are the great duties of the medical man. Let me ask you to always remember this, and to accept for your guide, that sublime inculcation, "One lives in deeds, not years; in thoughts, not breaths. He most lives who thinks most, feels the noblest, acts the best."

The members of this Faculty will endeavor to present to you those teachings that are regarded as most authentic and reliable. These teachings, like all others, must necessarily contain error, as well as truth. All that is true will stand the test of experience, and the shades of error will, if you continue to study, be dissipated by the progressive light of modern discovery. Study, then, must be your safeguard, as well as your companion. It is a melancholy fact, that a large proportion of the physicians of this country are content to abandon study with the acquirement of the diploma. You will meet, hereafter, with many of these; some doing discredit to the mental vigor of early manhood; some whom increasing years find not less devoid of wisdom, and others, whose only claim to respect is, that their heads are covered with the gray lichens of age. They will sneer at your industry; cavil, perhaps, at your practice, and denounce all that differs from what may once have been taught to them. Such practitioners, rather than undergo the labor necessary for obtaining an improved and better light, are content to rest in ignorance and to grope in mental darkness, clinging to doctrines long since exploded and nursing dogmas obsolete and dead.

In regard to such physicians, an anecdote, told by a German philosopher, may be appropriate and instructive. I will take the liberty of repeating it. A pedant had, for a long time, a nightingale, which glad-

dened him with its song. The bird died, and its owner found, on inquiry, that, if he obtained another, it could only be made a singer by long training and continued attention. To the pedant, this seemed too laborious. So he went home, saying, that sooner than incur this labor, he would rather keep his dead nightingale. This was acting, as we say in these times, "conservatively," but was it judicious? That the trouble of raising another bird might be lost, was possible, but that the dead nightingale would never sing, was certain. You will meet with many of your medical brethren, gentlemen, who are nursing their dead nightingales. You will also meet, however, before you graduate, very many, whose memory uninjured, whose perception increased, and whose judgment developed, are ready and able to expose the errors and vanity of students. Let me ask you to beware how you speak unguardedly before these merciless critics and to be careful lest you make yourselves as amusing as was Sganarel, the young student, in the comedy, who upon a doubt being expressed, by the veteran Geronte, that the heart was on the right side and the liver on the left, exclaimed, "Yes, it was so formerly, but that has been changed, and we have learned medicine in an entirely different method."

Like all students, you will have your pet theories and favorite doctrines. Be careful, gentlemen, to subject these to the test of progressive investigation. This can only be done, successfully, by patient and continuous study, and such study alone can open for you the honorable pathway to success. He who does not continue his studies, must, according to the philosophy of the ancient Greeks, lose what he already possesses, for the fire of our minds is like that fire which the Persians burn on their mountains; it flames night and day and cannot be quenched; with appropriate fuel, it burns beautifully and bright, but improperly fed, its shrouds its keeper in gloom and darkness.

Love knowledge then, gentlemen, with a great love; with a love enduring with your lives; for if you become rich and great it will sanctify the fortune which has made you so, and it will make men call it justice. If you are poor, it will render your poverty respectable, and make the proudest feel it unjust to laugh at the meanness of your fortunes. Such knowledge will comfort you; adorn you, and never forsake you; it will open to you the illimitable kingdom of thought, adding to your distinction, if distinguished; or, if ill-success attend you, it will afford a dignified asylum, wherein you may find compensation for those bitter disappointments which prudence and the best judgment are often powerless to avert.

There is very much for you to learn, but go forward without doubting or fearing the result. Be not disheartened by the arduous beginnings of science; by the difficulties, from which she springs; by the cheerless habitations in which you must seek her; by the want and sorrow, which so often journey in her train. Be true in acquiring all that medical science has to teach; for such a course will bring you a mental wealth which misfortune can never take away; it will make you comprehensive, in general acquirement; fertile in resources; strong in reasoning; prudent in action; adorning all the relations and offices of the true and accomplished physician.

